

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date 12 May 2005 (12.05.2005)

PCT

(10) International Publication Number WO 2005/042471 A1

(51) International Patent Classification7: C07C 233/67, 301/00, 317/36, C07D 203/14, C07F 9/09, A61K 31/166,

31/396, 31/661, A61P 35/00

(21) International Application Number:

PCT/NZ2004/000275

(22) International Filing Date: 29 October 2004 (29.10.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

529249

31 October 2003 (31.10.2003) NZ NZ

28 September 2004 (28.09.2004) 535618

(71) Applicant (for all designated States except US): AUCK-LAND UNISERVICES LIMITED [NZ/NZ]; Level 10, 70 Symonds St, Auckland (NZ).

(72) Inventors; and

(75) Inventors/Applicants (for US only): DENNY, William, Alexander [NZ/NZ]; 165 Gossamer Drive, Pakuranga, Auckland (NZ). ATWELL, Graham, John [NZ/NZ]; 192 Gowing Drive, Meadowbank, Auckland (NZ). YANG, Shangjin [NZ/NZ]; 19 Haycock Avenue, Mount Roskill, Auckland (NZ). WILSON, William, Robert [NZ/NZ]; 199 Smith Road, RD2, Waiuku (NZ). PATTERSON, Adam, Vorn [GB/GB]; 18 Manuka Road, Waiheke, Auckland 1240 (GB). HELSBY, Nuala, Ann [NZ/NZ]; 212 West Tamaki Road, Glendowie, Auckland (NZ).

(74) Agent: BALDWINS; PO Box 852, Wellington, 6001 (NZ).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: NOVEL NITROPHENYL MUSTARD AND NITROPHENYLAZIRIDINE ALCOHOLS AND THEIR CORRE-SPONDING PHOSPHATES AND THEIR USE AS TARGETED CYTOTOXIC AGENTS

(57) Abstract: The present invention relates to novel nitrophenyl mustard and nitrophenylaziridine alcohols, to their corresponding phosphates, to their use as targeted cytotoxic agents; as bioreductive drugs in hypoxic tumours, and to their use in cell ablation, including gene-directed enzyme-prodrug therapy (GDEPT) and antibody-directed enzymeprodrug therapy (ADEPT), in conjunction with nitroreductase enzymes.

